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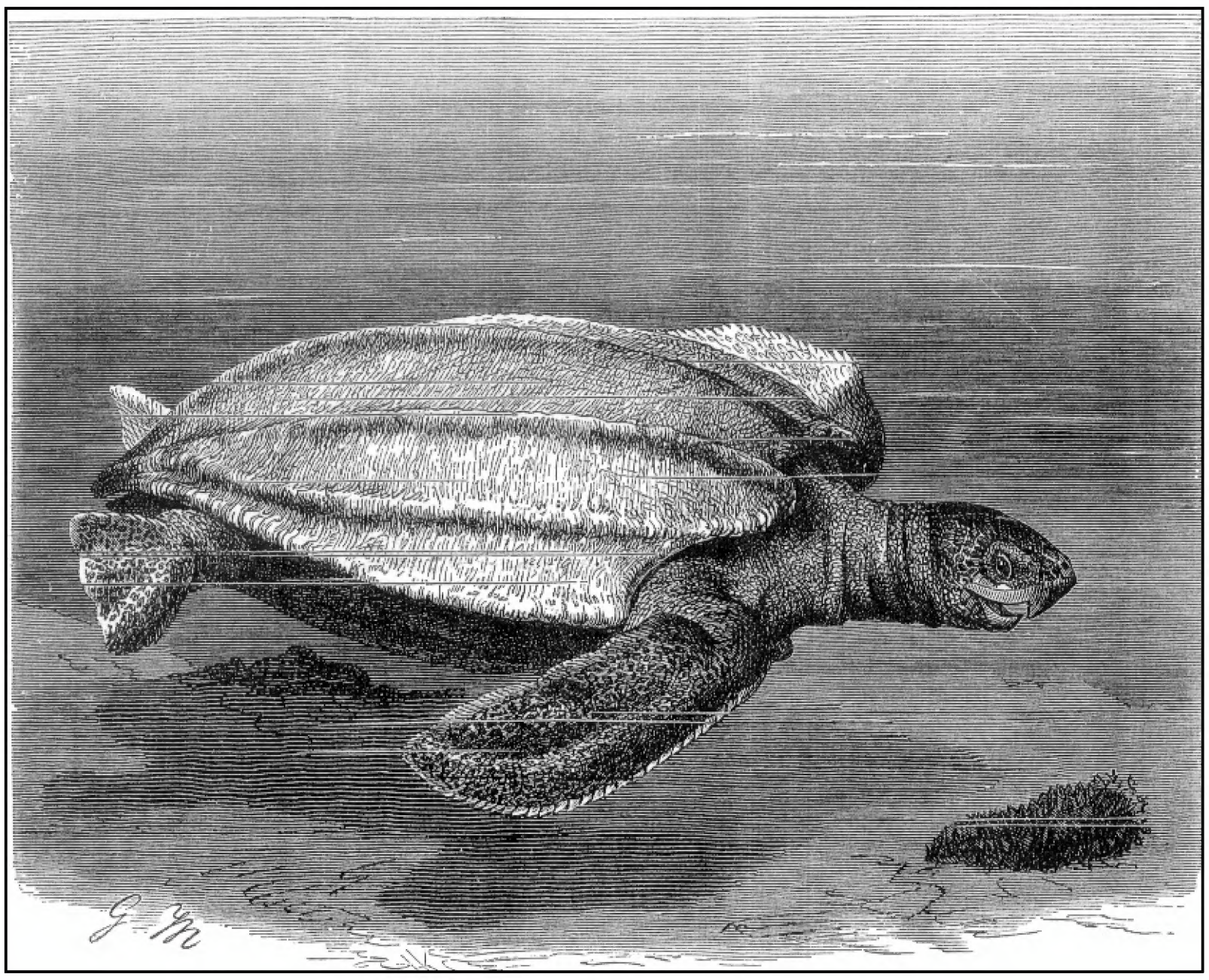

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Timber Rattlesnakes and Residential Development in Fiction and in Fact

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In recent years I have become involved in the conservation of the timber rattlesnake (*Crotalus horridus*) in southeastern Minnesota. As in many other parts of its range, the timber rattlesnake is legally protected in Minnesota, but a major factor in its decline in modern times is habitat loss through residential development. I was intrigued, therefore, when I heard that a newly published novel (Galant, 2006) was built on the premise that a greedy New Jersey developer has ignored environmental surveys and built a tract of upscale mansions in the neighborhood of a den of endangered timber rattlesnakes, setting the stage for a confrontation between homeowner and snake. I was intrigued, but I was also concerned. It is often the case with satires of this sort that nothing is sacred, and it would be hard not to take advantage of the irony that a venomous snake is legally protected.

Galant (2006) revealed in an explanatory note that the idea for her novel came when she was writing a newspaper column about a new housing development built in the habitat of endangered timber rattlesnakes in New Jersey, but that the story itself was made up. How does her fiction compare to reality? I'll try to discuss this without giving away much of the plot.

The premise that a developer might build and sell houses in the neighborhood of rattlesnakes is certainly based on reality. Here in southeastern Minnesota, rural valleys and ridgetops are being carved up for homes built adjacent to slopes where rattlesnakes den. It might be nice if it was required to disclose this information to prospective buyers! Ironically, homeowners in one Winona development used the presence of rattlesnakes to argue against a request to rezone adjacent land from agricultural to single family residential (Christenson, 2002).

Although the novel's premise may be believable, some of its details are questionable. First, it would appear that the key encounter between a rattlesnake and a soon-to-be-irate housewife has been punched up a bit. Not only is the snake relatively large (five feet long and 20 pounds!), but also it advances to attack in a way that I have never witnessed. Second, it's hard to imagine that a civilian in the position of assisting with the radiotracking of an endangered species would also have the authority to make arrests. There are probably good reasons that these sorts of duties are separated in real life! Third, in the real world, any homeowners responsible for the death of protected rattlesnakes in the vicinity of their homes would typically be given some latitude, if for no other reason than to avoid the sort of public relations backlash that arises in this novel. Unfortunately, some in the real world are willing to take advantage of this fact. I am aware of several cases in which homeowners killed snakes they knew were protected even though no one was in immediate danger.

In the real world, a number of steps may be taken to reduce the chance that landowners feel compelled to kill rattlesnakes. In Minnesota, for example, the Department of Natural Resources has: (1) produced pamphlets on timber rattlesnakes and on how to discourage or deal with unwanted snakes in yards; (2) sponsored educational workshops for the public, not only at state parks in southeastern Minnesota but also in neighborhoods where rattlesnakes are likely to occur; (3) established a roster of responders, whose phone numbers are provided to law enforcement centers and who are authorized to remove "nuisance" snakes from yards and release them in natural habitat, if possible within their home ranges. As a responder, I have been gratified to hear from a landowner that he "wanted to do the right thing" after he attended a rattlesnake workshop in his town, and I was pleasantly surprised when a mother with small children looked at the timber rattlesnake I had extracted from under her minivan and said, "What a beautiful animal!" Unfortunately, the sorts of measures taken in Minnesota are not discussed in Galant's (2006) novel. Indeed, it struck me that this book could serve as the basis for a some sort of training exercise for personnel in natural resource agencies involved in timber rattlesnake management ("How would this situation be handled here?" "How could it have been prevented?").

Quibbles aside, I did take some enjoyment in reading *Rattled*. It should be noted, however, that some of its adult content may be inappropriate for younger readers.

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The Herpetofauna of the University of Wisconsin-Milwaukee Field Station (Ozaukee County, Wisconsin): An Updated Report (2006)

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Abstract

The University of Wisconsin-Milwaukee Field Station (UWMFS) contains a diverse herpetofaunal assemblage that has received little attention from local researchers. Kapfer (2006) reported results of a series of surveys conducted on UWMFS grounds during a field herpetology course in 2004. One of the main goals of that course, aside from education, was to establish a data sampling and collection standard for future surveys and research that may be conducted on field station grounds. That report also attempted to update the species list of Reinartz (1986), to determine if all species listed could be accounted for, or if new species should be added. We here report the results of continued surveys conducted 2–4 June 2006, including new species encountered, morphological characteristics of captured individuals, and associated habitats/environmental parameters in which species were observed. We also discuss the efficacy of the survey methods employed.

Introduction

The University of Wisconsin-Milwaukee Field Station (UWMFS), located in the Cedarburg Bog and Cedarburg Beech Woods State Natural Areas (Ozaukee County, Wisconsin) contains an under-studied herpetofaunal assemblage. The only previous publications regarding the amphibians and reptiles of the UWMFS grounds are a species list in Reinartz (1986), and the results of surveys conducted by a field herpetology course in 2004 (Kapfer, 2006). To the best of our knowledge this course represented the first time semi-rigorous amphibian and reptile surveys had been conducted on the property. A degree of trial and error was inevitable in determining the efficacy of methods employed and the best locations for surveys to be conducted. Thus, the number of species and individuals encountered were not as large as originally hypothesized. The field herpetology course was offered again during 2006 (2–4 June), creating an opportunity to repeat and refine the surveys.

As in 2004, aside from education, the goals of this course were to update the current list of amphibian and reptile species present on the field station's grounds and adjacent habitats (hoping to account for previously observed species and add new species to the area's herpetofaunal list), while setting a standard for surveys that may be conducted in the future. We hope that these surveys will become long-term, and continue to be conducted annually, or biennially, as part of a monitoring plan for the amphibian and reptile species present on the UWMFS grounds.

Methods

Habitat Description: The UWMFS contains numerous habitats, which have been described in Kapfer (2006) and Reinartz (1985; 1986). Here we describe the habitats surveyed during the 2006 course, including in greater detail those surveyed in 2004 as well as additional habitats. As in Kapfer (2006), for ease of description, the field station's laboratory will be used as a central point and all habitats existing on the grounds will be described in relation to this building. Because the laboratory is close to the Cedarburg Bog, much of the field station grounds to the south, east and northeast comprise a peat bog. To the immediate west and northwest of the laboratory is a dry/mesic upland meadow or old-field meadow. This meadow is dominated by cool season grasses, including Kentucky bluegrass (*Poa pratensis*) and smooth brome (*Bromus inermis*). A variety of forbs are also well represented. Young woody growth, including sporadic common juniper (*Juniperus communis*) and small ash trees (*Fraxinus* sp.) have also colonized certain areas. In the adjacent lowlands, bordering the dry/mesic meadow, is a sedge meadow/wetland (approximately 130 m southwest of the laboratory and past the dry/mesic meadow, and also to the immediate east). Cattails (*Typha* sp.) and various sedges (*Carex* sp.), including lake sedge (*Carex lacustris)* dominate the marsh habitats, although reed canary grass (*Phalaris arundinacea*) is well represented also. Further to the south and southwest (approximately 300–600 m), upland habitats again persist as part of the property's rolling landscape. The furthest upland area is largely a short-grass prairie, dominated by Kentucky bluegrass and smooth brome. In certain areas, occasional common juniper, hedgerows, and small stands of trees have colonized the open meadow. These hedgerows consist of high-bush cranberry (*Viburnum opulus*), various dogwood (*Cornus* sp.), and Tartarian honeysuckle (*Lonicera tartarica*), while the small stands of trees include quaking aspen (*Populus tremuloides*), sugar maple (*Acer saccharum*), northern white cedar (*Thuja occidentalis*), and tamarack (*Larix laricina*). A ridge that appears to be part of an abandoned quarry, now overgrown, can also be found in this area. This ridge possesses a sharp slope on the northwest side, with piles of rocks, mostly overgrown with forbs. A thin strip of shrubby vegetation follows this ridge, and further to the south, the upland short-grass prairie continues to Blue Goose Road.

The debris pile found approximately 100 m north of the laboratory, as mentioned by Kapfer (2006), is still present as is

the nearby farmhouse and adjacent abandoned foundation, 40 m to the east of the junk pile. Further north is a small, but deep pond residing on the adjacent property belonging to the field station director. The pond has little emergent vegetation, but is dominated by lesser duckweed (*Lemna minor*), and possesses a silty bottom. The banks of the pond are narrow and covered with stinging nettle (*Urtica dioica*) and smooth brome, with mature trees along the periphery.

To the far west and southwest (~300–700 m) is the Beech Woods State Natural Area, a late succession hardwood forest consisting mostly of American beech (*Fagus grandifolia*), sugar maple and white ash (*Fraxinus americanus*). The thick canopy that persists within the Beech Woods results in the presence of several shade-tolerant understory plant species, including, but not limited to, Pennsylvania sedge (*Carex pensylvanica*) and numerous species of fern (*Osmunda* spp.). A thick layer of leaf litter and scattered woody debris from fallen trees is present throughout the Beech Woods. Several ephemeral and semipermanent wetlands can be found within the woods. The largest of these wetlands exists below an opening in the tree canopy, which has resulted in the introduction and spread of reed canary grass throughout the banks. The shallow wetland's benthic area is silty and covered with wood and leaf debris. The smaller wetlands presently exist within closed canopy regions of the woods, and possess little aquatic or emergent vegetation.

Mud Lake is in the southern portion of the Cedarburg Bog, approximately 1 km from the laboratory. It is a shallow (137 cm maximum depth) lake that comprises 67 ha of the Cedarburg Bog (Reinartz, 1985), with a silty, mucky benthic area. Emergent vegetation is present in a thick peripheral band (10–20 m) around the lake, consisting mostly of yellow lilypad (*Nuphar variegata*), bulrushes (*Scirpus* sp.), cattail, and a variety of sedge species. It is fed by a stream that runs southwest through the bog before entering the lake.

Survey Methods Employed and Construction: As with the surveys conducted during 2004, "search and seizure" methods (Karns, 1986), were most commonly employed.

Artificial cover objects were again incorporated, following methods similar to those of Busby and Parmelee (1996), Grant et al. (1992), Karns (1986), and Parmelee and Fitch (1995). Because cover object surveys in 2004 did not result in high capture rates, changes to their implementation were made. In addition to laying down pieces of plywood cut in approximately 91 cm by 91 cm sections, the efficacy of other materials were tested, including cleaned oil drum covers, and old hubcaps with remnants of the associated rubber tire still in place. Furthermore, unlike in 2004, artificial cover objects were put into place approximately 7 d prior to use, rather than 24 h prior to use. Vegetation below cover objects was cut before they were put into place.

The locations for placement of artificial cover objects were also modified. In 2006, these objects were only placed in one of the two locations utilized in 2004: ten cover objects were again placed 110 m west of the laboratory in a line that followed the contour of a grassy hill, but not in the farther location (see Kapfer, 2006). Objects were placed at the base of the hill where the drier grassy slope met the very edge of the emergent aquatic vegetation associated with the adjacent lake sedge wetland. In addition, numerous pieces of plywood from a previous project, which have been in place for a number of years, remained near the first cover object array placed in 2006. These older pieces of plywood were also routinely checked for amphibians and reptiles. Nearby, two arrays of eight pieces of plywood, eight drum covers and two old hubcaps were placed 1 m apart on two grassy slopes between the laboratory and the farmhouse. These locations were not used for cover object arrays in 2004. To avoid surveying during high mid-day temperatures, "search and seizure" techniques, as well as flipping of artificial cover objects were conducted during morning and late afternoon surveys (once between 0800 and 1000 h, and after 1700 h). These surveys began by moving as a group to the west of the laboratory, through the upland prairie toward the wetland, then following the contour of the upland hill around the laboratory to the south. At this point, surveyors moved south/southwest and surveyed upland and ridge habitats, before moving to cover board arrays to the east and north near the farmhouse. Surveys ended by flipping debris in the junk pile near the farmhouse.

Drift fences yielded few captures in 2004 so only one of the original two fences was constructed and employed in 2006. In addition, a "T" orientation (rather than the original "X" orientation) with 10 m sections was used. A combination of pitfall traps (constructed of coffee cans dug into the ground) and three funnel traps were used. This drift fence was constructed 700 m west of the laboratory near the ephemeral wetlands in the Beech Woods. Drift fences and traps were in place approximately 24 h prior to use, and checked while conducting "search and seizure" techniques in the mid-afternoon.

Table 1. Amphibian and reptile sample size comparison between 2004 and 2006 surveys at the UWMFS (Ozaukee Co., Wisconsin).

	Sample sizes	
Species	**2004**	**2006**
Ambystoma laterale	5	9
Notophthalmus viridescens	0	3
Bufo americanus	1	1
Hyla versicolor	N/A*	1
Pseudacris crucifer	2	6
Rana clamitans	N/A*	2
Rana pipiens	N/A*	2
Rana sylvatica	7	4
Lampropeltis triangulum	2	9
Thamnophis butleri	2	1
Thamnophis sirtalis	2	16
Chelydra serpentina	0	1
Chrysemys picta	3	14
Emydoidea blandingii	0	1

* Heard only during call surveys.

Table 2. Comparison of number of individuals captured among five methods employed to survey for amphibians and reptiles, 2-4 June 2006 (UWMFS, Ozaukee County, Wisconsin).

Taxon	Survey method employed				
	Search & seizure	**Cover objects**	**Hoop nets**	**Minnow traps**	**Drift fence**
Anura	17 (6 species)	0	0	~20 (1 species)	0
Caudata	5 (1 species)	0	0	3 (1 species)	0
Serpentes	15 (2 species)	16 (3 species)	0	0	0
Testudines	1 (1 species)	0	15 (3 species)	0	0

Minnow traps had been suggested as a means of successfully surveying for larval amphibians and some aquatic salamander species (Robert Hay, Wisconsin DNR, pers. com.). Two funnel traps of hardware cloth and window screen, made to mimic minnow traps, were placed in the large wetland located in the Beech Woods.

Hoop nets were once again used to survey for turtles, following the recommendations of Karns (1986). However, three hoop traps were added to the surveying regime (making a total of 5). As in 2004, two hoop nets were placed on the north shore of Mud Lake roughly 10 m apart. A third was placed in a small wetland located along the trail to Mud Lake. Two more hoop nets were placed 10 m from each other on the north shore of the pond located on the field station director's residence. Hoop nets were checked daily, usually after 1700 h.

Frog call surveys, following the techniques in Mossman et al. (1998) were also conducted. In 2004, these were conducted by walking along the wooden boardwalk erected for hiking into the Cedarburg Bog; in 2006 frog call surveys were conducted from the front porch of the farmhouse for approximately 2 h each evening after dark.

Morphological Data Collected on Captured Individuals: Recording of morphological data was the same as in 2004 (Kapfer, 2006). Unlike 2004, only eastern milksnakes (*Lampropeltis triangulum*) encountered were implanted with Passive Integrated Transponder (PIT) microchips for later identification.

Habitat Data Collected: The same methods were employed in 2006 as in 2004 (Kapfer, 2006).

Results

Excluding species heard during frog call surveys, only individuals that were captured and positively identified are listed here. Most of the amphibian and reptile species encountered during this study were on the Cedarburg Bog/Beech Woods property, managed by the UWMFS and associated Mud Lake.

A total of 72 specimens spanning 14 species was encountered (3 additional species from 2004; Table 1). The "Search and Seizure" survey method yielded a high number of captures (N = 38; Table 2). Old artificial cover objects were effective for capturing snakes (N = 16), unlike new cover objects (N = 0). Hoop traps were highly successful for capturing turtles. Minnow traps were successful at capturing targeted/desired species, resulting in three captured caudates (one on each of three consecutive days of surveying) and numerous larval anurans. Drift fences resulted in no captures.

Amphibians: Nine species of amphibians were encountered in 2006 (seven anuran species and two caudate species), one of which was not encountered in 2004 (*Notophthalmus viridescens*; Table 3). Furthermore, surveyors captured adult specimens of two species (*Rana clamitans* and *Hyla versicolor*) that were only heard during calling surveys in 2004. Although smaller sample sizes of two species were obtained compared to 2004, all other amphibians were encountered at an equal or higher rate (Table 1). Amphibians were most commonly observed under rotting vegetation and leaf litter near the

Table 3. Amphibian species encountered, including length (snout-vent in caudates, snout-rump in anurans), weight, and habitat in which found most often. Habitat codes: WEW = Woodland Ephemeral Wetland (hardwood); OM = Open Marsh with adjacent grassy meadow; DP = Director's Pond.

Species	N	Length in mm $\bar{x}$ (SD)	Weight in g $\bar{x}$ (SD)	Habitat
Bufo americanus	1	3.8	N/A	WEW
Hyla versicolor	1	45	6.5	WEW
Pseudacris crucifer	5	27 (3.5)	N/A	WEW
Rana clamitans	1	71	41	DP
Rana pipiens	2	62 (4.1)	18.2 (3.8)	OM
Rana sylvatica	4	48 (3.5)	11.9 (3.9)	WEW
Ambystoma laterale	5	67 (6.7)	7.7 (2.1)	WEW
Notophthalmus viridescens	3	3.8 (1.4)	N/A	WEW

Table 4. Reptile species encountered, including length (snout-vent in snakes and carapace in turtles), weight, and habitat in which found most often. Habitat codes: GM = Grassy Meadow; OM = Open Marsh with associated grassland or meadow; JP = Junk Pile; ML = Mud Lake; DP = Director's Pond.

Species	N	Length in mm $\bar{x}$ (SD)	Weight in g $\bar{x}$ (SD)	Habitat
Lampropeltis triangulum	9	70.6 (8.8)	131.9 (60.8)	GM, OM
Thamnophis butleri	1	36.5	54	OM
Thamnophis sirtalis	14	45.8 (4.4)	57.8 (13.2)	GM, OM, JP
Chelydra serpentina	1	28	N/A	DP
Chrysemys picta	13	13.2 (3.8)	294.0 (170.1)	ML, DP
Emydoidea blandingii	1	25.7	1277	ML

ephemeral wetlands located in the Beech Wood forest. However, one species (*Rana pipiens*) was encountered in an open meadow surrounded by marsh located to the southwest of the laboratory. In addition to an adult *Hyla versicolor* being encountered in the Beech Woods, calling males were also heard to the immediate east in the open wetland. *Rana clamitans* was encountered in two locations: adults and metamorphosed juveniles were captured at the small, deep pond located near the field station director's property, while adult males were heard calling in the vicinity of Mud Lake.

Reptiles: Six species of reptiles were encountered (three snake species, three turtle species; Table 4). Species encountered in 2004 were recaptured in 2006, and with the exception of *Thamnophis butleri*, larger sample sizes were obtained (Table 1). Snakes were most often found in the grassy areas immediately adjacent to the laboratory and in the piles of debris located to the southwest and north of the laboratory during "search and seizure" and cover board surveys. All but three *Lampropeltis triangulum* were found under old cover boards (N = 11). Of the remaining, one was discovered near the foundation of the old farmhouse, while the other two were found under fallen logs in upland areas during "search and seizure" surveys. Of the *L. triangulum* captured during all surveys, six were recaptured at least once (with one having been marked during 2004 surveys). *Thamnophis sirtalis* was often found under old cover boards, junk pile debris, and among vegetation during "search and seizure" surveys. Compared to 2004, two additional turtle species were captured in hoop nets, and more *Chrysemys picta* were observed (Table 1). All but one turtle were captured at two locations: Mud Lake and the pond near the field station director's house. The remaining individual, a subadult *C. picta*, was captured via "search and seizure" surveys in an ephemeral wetland in the Beech Woods.

Table 5. Reptile and amphibian species listed by Reinartz (1986) from the Cedarburg Bog State Natural Area (Ozaukee County, Wisconsin) and those captured during current surveys.

Reptile species	Amphibian species
Diadophis punctatus	*Ambystoma laterale** †
*Lampropeltis triangulum** †	*Ambystoma tigrinum*
Storeria dekayi	*Notophthalmus viridescens* †
Storeria occipitomaculata	*Bufo americanus** †
Thamnophis butleri ‡	*Hyla versicolor** †
*Thamnophis sirtalis** †	*Pseudacris crucifer** †
Chelydra serpentina †	*Pseudacris triseriata*
*Chrysemys picta** †	*Rana clamitans** †
Emydoidea blandingii †	*Rana pipiens** †
	*Rana sylvatica** †

* Species found during 2004 surveys (Kapfer, 2006)

† Species found during 2006 surveys

‡ Species not listed in Reinartz (1986) that was found in both 2004 and 2006 surveys

Discussion

Comparison of Current Surveys with Past Reports: In 2004, 11 (61%) of the original 18 species reported by Reinartz (1986) were encountered. The three new species encountered in 2006 raise this total to 14 (77.7%; Table 5).

Many common amphibian species are difficult to find when not congregated for breeding purposes in the spring. We suggest that this is why *Pseudacris triseriata* and *Ambystoma tigrinum* were not found. Furthermore, an individual *Ambystoma tigrinum* was reported on field station grounds in fall 2004 (G. Casper, pers. com.), reconfirming the presence of this species. Once again, *Hyla versicolor* was identified from the presence of calling males. Yet unlike in 2004, an adult individual was captured during surveys. Kapfer (2006) incorrectly states that Vogt (1981) reports *H. versicolor* and *Hyla chrysoscelis* are not often found in association with one another. Yet, to our knowledge, no evidence of *H. chrysoscelis* has been found on field station grounds. Thus, unless further evidence presents itself, we continue to maintain that only *H. versicolor* (and not *H. chrysoscelis*) is present.

The state Threatened (no longer "Endangered" as Kapfer [2006] reports) Butler's garter snake (*Thamnophis butleri*) was again discovered during 2006 surveys. It seems likely that *T. butleri* was present when Reinartz's (1986) species list was created, but the difficulty in discriminating it from *T. sirtalis* may have caused its accidental omission from this earlier publication. We are uncertain whether several of the remaining undiscovered snake species on the original list are still present at the UWMFS (particularly *Diadophis punctatus*) or if

their extremely secretive nature makes them more difficult to encounter (i.e., *Storeria occipitomaculata* and *S. dekayi)*. Gravid female *S. occipitomaculata* were found under cover boards in nearby Waukesha County on 1 June of the same year (pers. obs.). If this species was present at UWMFS, it seems we should have encountered it during our surveys. One must also consider that the presence of *Lampropeltis triangulum*, a known snake predator (Vogt, 1981), under cover boards has caused the exclusion of the smaller *S. occipitomaculata* and *S. dekayi* during such surveys.

Reinartz (1986) does not report which subspecies of painted turtle (*C. p. belli*, or *C. p. marginata*) is found in the area. In 2004, the three turtles captured in Mud Lake were believed to be *C. p. marginata*. However, in 2006 roughly 50% of the individuals encountered appeared to be intergrades between *C. p. marginata* and *C. p. belli*. Further surveying work is necessary to determine the proportions of each subspecies and intergrades existing in the vicinity.

Unlike in 2004, a Blanding's turtle (*Emydoidea blandingii*) was captured in the hoop nets placed at Mud Lake. This information, coupled with anecdotal sightings from the last several years, gives indications that this state Threatened species is becoming more common on-site (J. Reinartz, pers. com.).

Comparison of Surveying Techniques: "Search and seizure" techniques (Karns, 1986) were the most effective, resulting in 52.7% of all captures. Neither drift fences nor newly placed artificial cover boards resulted in high numbers of amphibian or reptile captures. However, cover boards that had been in place for several years prior to 2006 surveys were highly effective at producing snakes (51.6% of all snake captures). Thus, it seems likely that the age of cover objects is of particular importance in efficacy of artificial cover object surveys. Because of this likely scenario, plans are being discussed for the addition of permanent cover board arrays to the field station's grounds. Drift fences will likely continue to be incorporated in future herpetology courses, as it is important to show students how these surveying tools should be oriented and constructed. The reason for their ineffectiveness is unknown, yet we believe that the time of year in which they are being implemented plays a role. For example, were the course offered earlier in the spring, during salamander migration to wetlands for breeding, drift fences would possibly yield a higher number of captures.

Future Goals: We intend to continue conducting similar surveys on an annual or biennial basis, to determine the most efficient way to acquire data on resident amphibians and reptiles. We hope to accumulate enough baseline data on the species at the UWMFS to inspire further, more detailed research by university faculty and students. We also hope to reaffirm the presence of species listed in Reinartz (1986) that were not encountered during 2004 or 2006 surveys.

Acknowledgments

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Polydactylism in Bosc's Monitor (*Varanus exanthematicus*)

Mark K. Bayless*

There have been a few isolated incidents of polydactylism in amphibians and reptiles reported in the literature, for instance in the smooth newt (*Triturus vulgaris*) (Griffiths, 1981) and in the American alligator (*Alligator mississippiensis*) (Giles, 1948). It has been recently discovered that frogs (*Rana pipiens*) in North America have been exposed to toxins in the water promoting polydactyl and polypod "monster" frogs in this region, possibly due to toxins in the environment that affected the *Rana* frogs during their development.

The Bosc monitor (*Varanus exanthematicus*) is indigenous to West and Northeast Africa (Bayless, 2002, 2006). The author reports on a captive Bosc monitor (*Varanus exanthematicus*) purchased on 24 June 1993 that measured 20 cm [11.5 snout-vent length, 8.5 tail length) [= 7.8 in] total length. This particular animal had six toes on each hind foot; the forefeet had the five toes typical of Varanidae. The extra toes appeared fleshy to the touch, and did not appear to have any bones with them, although they did have a claw on each sixth toe, as their other toes had. The animal walked, climbed, and behaved like any other Bosc monitor seen by the author in captivity. This particular animal later died of intestinal blockage.

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* This note was submitted just a few weeks before the death of the author, 1 November 2006.

Bull. Chicago Herp. Soc. 41(11):203, 2006

Book Review: *Rattlesnake Adventures: Hunting with the Oldtimers* by John W. Kemnitzer, Jr. 2006. 223 pp. Krieger Publishing Co., Malabar, Florida. ISBN 1-57524-278-8. $32.50

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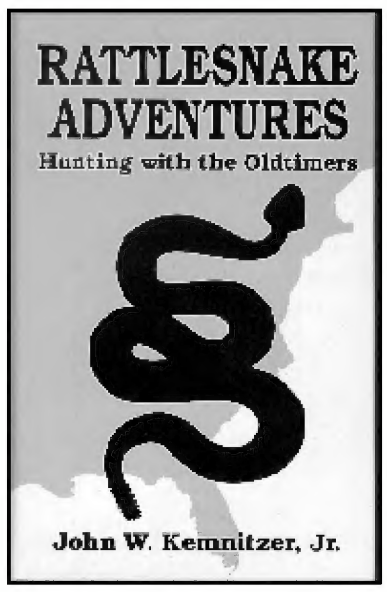
Rattlesnake Adventures comprises 16 chapters. Three chapters are from the works of Raymond Ditmars; four are from Carl Kauffeld's books; two are by the author/editor. The rest are by a wide range of authors, some familiar, some not, and include excerpts from unpublished works by friends of the author/editor. Each chapter, except his own, is preceded by a page of comment by the author/editor.



Many of us have read the works of some of these authors, particularly Ditmars and Kauffeld, and will enjoy this anthology of chapters from their books. However, Kemnitzer's obvious attempt to insert himself into this company–to compare his own collecting adventures and his written accounts of those adventures with those of these two icons of herpetology–detracts from what he would like this book to be. This is not destined to become a classic in the genre of the old-timers.

Kemnitzer's enthusiasm for his field work is apparent and those of us who have experienced such feelings will certainly relate to what he is expressing.

The 16 pages of black-and-white photos and four pages of color photographs are interesting, but several of the black-and-white photos lack contrast and are difficult to discern.

I did not get as interested in this book as I thought I would. The title whetted my appetite but the inside did not meet my expectations. At $32.50 I felt it was overpriced. All things considered I reluctantly recommend this book to any who would like to vicariously relive some field trips and fun with some of yesteryear's well-known herpetologists.

Bull. Chicago Herp. Soc. 41(11):204-205, 2006

Book Review: *Voyage of the Turtle: In Pursuit of the Earth's Last Dinosaur* by Carl Safina 2006. 383 pp. Henry Holt and Company, New York. $27.50

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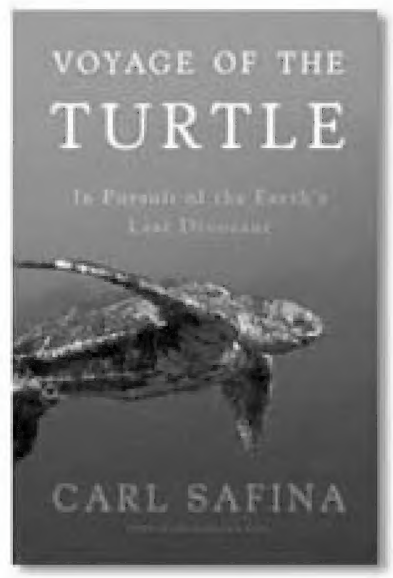

Read this book. Not because it will become a classic, though it will, but because it has lots of important things to say. Just as Archie Carr's *Windward Road* and *So Excellent a Fishe* brought the attention of the public to the plight of marine turtles in nontechnical, readable, highly accurate and factual text, Safina's book introduces a new generation of readers to current marine turtle conservation issues and initiatives. This book provides a good review of what has been learned, what has been accomplished, and new directions in conservation since the plight of sea turtles first became known to public in the late 1950s.

Voyage of the Turtle is about the leatherback, but it covers far more than that. In addition to updating us on the concerns of other species of sea turtles, it provides a rather nice overview of the basic principles of oceanography as they relate to the movements of marine creatures with complex lives.

The author simultaneously accomplishes several goals:

• explains the strange biology and natural history of the leatherback, the sole survivor of a 125-million-year lineage. A lot has been learned about leatherbacks in the last decade and the information presented is current. The population estimates he reports, a compilation of nesting surveys throughout the species range, will be a good benchmark against which to compare populations in the coming decades.

• exposes all the conservation nuances, and their complexities, facing the survival of leatherbacks. Relevant issues and successes are varied and rich for the leatherback has experienced both a 95% decline in the Pacific in just the last two decades and during this same period an exponential recovery in the Atlantic.

• describes and credits successful conservation efforts and introduces us to the people behind them. The interactions between the ancient turtles and the people providing supporting roles in their survival are delicate but effective. It's not just local people, and the commercial fisheries who roam the world's seas that need to change their traditional ways. We are beginning to see results from academic biologists who are finally rolling up their sleeves and working directly with specific local conservation issues.

• makes one aware of the need to understand all the complexities and the opposing perspectives of issues to achieve long term conservation goals. Local culture, personal needs, public needs, various regulations, government agencies, and the turtle's needs often conflict and the search for common ground goes way beyond the scope of science, scientists and science gismos. Success requires foresight, common sense, hard work, and patience. Successful conservation is no longer the subordinate stepchild of esoteric research.

Besides the well written text the book has a number of informative color photographs, an appendix naming a few places people can go and see marine turtles, an index, and a list of references used in the development of each chapter.

In addition to this work, Safina wrote the award-winning *Song for a Blue Ocean* (2000) and *Eye of the Albatross* (2003). He is also president of Blue Ocean Institute. As a result this book benefits from the author's in-depth understanding and appreciation of the marine environment and the perspective he lends to findings of recent research. While Safina is not directly working with leatherbacks himself, his work between the book's covers is not done as an outside reporter, but as a writer who lives with tides, marine environmental issues, and salt spray. He interacts with those who know the turtles firsthand, the fishermen, biologists, and indigenous peoples, not through interviews, but through working closely with a global network of respected friends.

While the selfish nature of people that allowed the earth's leatherback populations to crash to these critical levels disheartens, it is informative to see what a few dedicated people have accomplished. Armed with information from research and monitoring conservationists were able to document both the collapse of specific populations and the recovery of protected and managed ones. For instance, the idea of using only the adult nesting females for the tallying the size of a population has merit; it is currently used for sea turtles and marine birds (nesting pairs), and really gives a much better index of the issue than by also including adult males, immatures, juveniles and subadults. In the past census information was used almost exclusively by scientists presenting technical papers at meetings, or it appeared only in published journals read by other ardent academic herpetologists. But now the census numbers have an expanded use—setting conservation priorities, establishing regulations, guiding planned development of tropical beaches, for debating knotheads, and writing useful books.

The turtle itself is the lead character, a more memorable one would be hard to imagine. Just the photo of the leatherback on the cover is reason enough to want to own the book. Excluding several of the great whales, this turtle ranges more widely than any animal on earth. Safina allows these world citizens to all but speak for themselves through his descriptive narratives and quotes from the book's cast.

And what is this reptilian turtle? A "hot-blooded" beast that can live in freezing waters, diving to depths of nearly three thousand feet, flying through the oceans while living off jellyfish, lacking scales and claws, having mammal-like blubber and growth rates, migrating throughout the world's seas, and one that is highly vocal. Add to that a 6–7 foot upper digestive tract

lined with downward pointing spines, eye sockets of massive size, vascularized cartilage, tissue growth that is different from all other known vertebrates, and an ability to store oxygen in muscle tissues. Not exactly reptile-like, and not sporting the characteristics typically attributed to turtles. Oh, and did I forget to mention size? The leatherback is the largest living "reptile" on earth (overfed zoo crocs don't count). Most of the exceptions as to what defines a reptile can be found in this single species, a free sprit of reptilian counterculture. The leatherback is by far the strangest creature on earth, and perhaps the most interesting. Its uniqueness (an overused word, but one that well fits this "turtle") is somewhat masked by its conservative streamlined external appearance, but what it does and how goes about doing it is most bizarre.

The author's "dinosaur" analogy works well when discussing my 1980s Epson computer, but for the leatherback it has such a ring of truth though that some academics will take exception to the author's frequent use of this term for this turtle. However, the comparison serves well in driving home the odd nature and ancient ancestry of the beast.

It is clear that Safina shares our contempt and distrust of a political system that seems blind and apathetic to the obvious conservation needs of even high profile species such as sea turtles. It was informative to learn his frustrations over the regulations regarding the use of turtle excluder devices (TEDs) paralleled mine. Required rigging of U.S. Atlantic and Gulf Coast shrimp trawlers with equipment that would exclude leatherbacks from the bycatch did not go into effect until August 2003. This was a full quarter of a century after they were developed and proven to be effective. In 1987, one hundred thousand trawler-drowned sea turtles after it was first shown that the devices worked, they were finally required in U.S. waters. And then the battles with the shrimpers really started, first locally, and then globally when we declared we would not import shrimp from countries that did not mandate TEDs. Owners of trawling fleets who first screamed, protested and sued because of regulation soon discovered that they actually liked the devices. The TEDs save time, gave them a better product (shrimp not beat to shreds by large thrashing sea turtles), and allowed for trash and other unwanted objects to be free of the trawlers' nets. In fact the original TEDs were developed by shrimpers to make their work more efficient. Yet, to say that our National Fishery Service, Congress, and state agencies were not in tune with the conservation issues despite the high body counts of drowned turtles washing ashore (perhaps only 13% of the total trawler mortality) is an understatement. North Carolina sued the U.S. Commerce Department over the TED regulations, and the Coast Guard became involved; why should we compete with countries for lower priced shrimp and suffer all these regulations? Well the real question is "Why do we have to fight our government to get them to do what is clearly the right thing?"

Safina also addresses global warming; it has the obvious detrimental effect on sea and air temperatures, but rising seas are now lapping at the narrow interface between intertidal zones and turtle nesting sites, oceanic currents and counter currents as we know them are in jeopardy, and carbon from our coal and gas emissions is trapped in marine environments at rates which cannot be recycled. The author's collective thoughts about the current administration's lack of concern regarding of this problem goes beyond the effects it will have on leatherbacks.

The discussions about conservation problems and their mishandling by agencies are not limited to leatherbacks, or sea turtles. Tuned-in readers will see many parallels to the issues and solutions addressed in this book that have likewise been ignored, sidestepped, and given token solution by regulatory agencies for other vulnerable species. For example, in Maryland, diamondback terrapins are now jeopardized by a small group of watermen who want a no-limit fishery on these estuarine turtles. This is in response to a growing Asian market for tons of terrapins, yet Maryland is supporting 16 commercial fishermens' position. A grass roots petition addressing this nonsense is being circulated among the state's residents as I write. In North Carolina the flounder fishery has gained an exemption for mortality on marine turtles, they are expected to regulate themselves, and after they report that their annual net drowning quota is reached they will shut down their own fishery for the rest of the year (now how clever is that?) Then there are endangered bog turtles in the Northeast. Compared to leatherbacks their needs are simple, protecting and effectively managing a few 2–5-acre wetland sites here and there and it's done, but for a few exceptions this has not been considered. As a protective band-aid (a better word choice might be condom) these same agencies boast that all their decisions are all based on the best available science. Their decisions are more likely to further the study of these problems than to act on them.

One does not need to search far for other similar examples, and while the issues are not limited to turtles, the philosophies driving, or hindering, solutions for the leatherback can often be shared with the goings-on of other endangered species programs. Our government is more concerned with regulating, planning, studying plans, and reinventing programs than in good stewardship and stabilizing and increasing turtle populations. In some cases it is interesting to see that agencies originally responsible for problems can later expand their empires by appropriating funds to study the problems they have created, and then ask for additional funding and staff to have meetings in order to plan how to correct the issues. Hopefully in the long term the leatherbacks are as adaptable and resilient as these agencies. Because of similarities of political shortsightedness across most conservation issues, this book will inspire anyone even marginally interested in helping long-term conservation of almost all species. Yet, things can shift, and Carl Safina provided many promising examples.

Probably the most significant take-home point of the book, other than the regal nature of leatherbacks, is that successful conservationists can function in a world characterized by both hope and despair. Even with a stacked deck it is amazing what a few hard working, highly focused people accomplished during the last decade or so.

The author concludes hope comes from local involvement. I would add that it also comes from writers like Safina who take the effort to understand complex conservation issues and distill them into a format that will both educate and inspire the public. It is books such as this that can arm us with the understanding and passion needed to curb the tide of apathy, and in the long run it will be enflamed passions that allow creatures like the leatherback safe seas while coexisting with our greedy species.

Bull. Chicago Herp. Soc. 41(11):206-208, 2006

HerPET-POURRI
by Ellin Beltz

A long-term follow-up report

In 1985 researchers counted only 702 Kemp's ridley sea turtle nests along Mexican beaches, down from a high of tens of thousands in the early 1950s. It seemed highly unlikely that the species could recover from such a hit; but conservation organizations including HEART and others took root. They stopped the slaughter in the water of adult turtles, reduced the number of humans and other predators poaching eggs, collected eggs, raised and head-started turtles both in Mexico and in the United States. Hatchlings were released by the bucketful; head-starters got rides on boats out to the open ocean. Local people have been involved every inch of the way. Ecotourism and foundation dollars have created economies around the turtles that did not exist 20 years ago. And the results are now in. Last summer, 2006, was a bumper year for Kemp's ridley turtles, they had 11,600 nests compared with 2005 nest totals of 10,099. The seafood industry continues to lobby the U.S. government heavily to support turtle programs and have pressured Congress several times to restore funding for turtles. After a long fight, in 1987 the U.S. required its own shrimpers use turtle excluder devices [TEDs] and in 1989 passed a law requiring imported shrimp to have been fished with a TED in place. Researchers hope the support continues now that the turtle numbers are beginning to climb. [*South Florida Sun-Sentinel*, July 9, 2006, from Bill Burnett]

A fan letter!

Hi Ellen, Love your section of the *Bulletin* and I just finished reading it from the September issue and I had to look up info on the priestess getting eaten. Turns out one of the sources for the story and the mayor of the town are denying the story. . . . Don't know how much you hear it but thanks for your section of fun in the monthly issues. *Jason Hood*

Dear Jason: I hear it as much as you read it. Every note that's just about the column gets quoted. *Ellin*

Only the good die young

A 37-year-old graduate student at the University of Central Florida unfortunately died during a "hand capture" of a sea turtle—a maneuver he'd performed dozens of times flawlessly. He died doing what he loved best and the turtle community is in shock that one of its brightest and most avid members has been lost at such a young age. He had planned to move to Hawai'i upon receiving his doctorate and continue working with turtles in the Pacific. Peter P. C. H. Pritchard and others have founded a sea turtle fund in honor of Boyd Lyon: http://www.boydlyonseaturtlefund.org/. [*South Florida Sun-Sentinel*, August 12, 13, 14 and 15, 2006, from Bill Burnett]

Who's the nuisance, gators or us?

• Nuisance gator trapper Todd Hardwick said, "Alligator common sense is lacking in Florida. You're surrounded by more than a million gators here. Behave properly and you'll be fine." He also pointed out that most nuisance gators are killed and that complaints are on the rise largely because of increases in the human population, not any change in the ferocity of alligators or the return of their numbers to pre-World War II levels. There were no recorded human fatalities to alligators prior to 1948. [*Orlando Florida Sun-Sentinel*, August 14, 2006, from Bill Burnett]

• Meanwhile, the state of Florida destroys about 7,000 nuisance gators a year. [*Chicago Sun-Times*, August 16, 2006, from Mary Beth Trilling]

• Putting this into perspective are some statistics from the Centers for Disease Control in Washington. From 1979 through 1996, 304 people in the U.S. died from dog bites. Most were children. Each year, 4.7 million people in the U.S. are bitten; one in six, approximately 800,000 people, require medical treatment. But as far as newspapers, TV and radio are concerned, there's a plague of deadly gators out there.

• Gators doing the gator thing and people doing the people thing continue to collide in Florida. There are estimated to be 1.5 million gators and 18 million people in the state, all of which is below the sea level projections for 2078. The statistics from 1971 to August 8 tell a story, which when graphed reveals no clear image of any trend increasing, except human fatalities from 2001 to 2006. I omitted data from the Florida Fish and Wildlife Conservation Commission for years when there were no fatalities and calculated an interesting set of numbers. Until 2005, your chances of surviving an alligator attack were greater than than of dying in it by three to one or better. Unfortunately 2006 reversed that trend; three out of four people in major attacks were killed. That's why the authorities continue to caution people to be very careful around these ancient and primitive reptiles.

Fatalities per Alligator Attack for Selected Years

Year	Deaths / Major attacks	% fatal
1973	1 / 3	33%
1977	1 / 13	8%
1978	1 / 6	17%
1984	1 / 5	20%
1985	1 / 4	25%
1987	1 / 4	25%
1988	1 / 6	17%
1993	2 / 8	25%
1997	1 / 3	33%
2001	3 / 11	27%
2003	1 / 9	11%
2004	2 / 9	22%
2005	1 / 6	17%
2006	3 / 4	75%

• "Florida wildlife officials are considering removing alligators from a list of protected imperiled species and letting home-

owners deal with nuisance gators themselves. . . . The changes would downgrade gators from a species of special concern to a game animal within five years and then remove them altogether from the state's list of imperiled animals. . . . Biologists believe there is now about one alligator for every nine humans living in Florida. [The] state alligator coordinator . . . [said] the potential changes have nothing to do with the three fatal alligator attacks that occurred in one month earlier this year." [*South Florida Sun-Sentinel*, November 1, 2006, from Ms. G. E. Chow and Mr. Bill Burnett]

• If indeed humans had managed to extirpate alligators as so very nearly happened in the middle of the twentieth century, we would have never have learned: " . . . that alligators have a ferocious immune system that can take down a vast range of viruses, bacteria and other infectious microbes, including HIV, the virus that causes AIDS. . . . Despite their stout resistance to what nature dishes out, alligators have turned out to be vulnerable to man-made chemicals . . . [including] pesticides, fertilizers and other pollutants, making them a useful early-warning system of possible hazards to people." Researchers plan to sequence the gator genome to see if any of these traits pop out. [*South Florida Sun-Sentinel*, August 14, 2006, from Bill Burnett]

SSSSSnakes on a Plane

• The reptile wrangler for *Snakes on a Plane* discovered that "not all the hot snake action took place in the movie. On-set romances ignited and . . . [he] went home with 50 more snakes than be brought to [the film site]." He said, "Snakes fell in love and babies were born. It was *9½ Weeks* without legs." [*USA Today*, August 21, 2006, from Bill Burnett]

• Titles that didn't make it: *A Clear and Serpent Danger*, *Throw Mamba from the Plane*, *Hiss, Hiss, Fang, Fang*, *Cobra Cabana*, *Snake Shore Drive*, *Diamondbacks are Forever*, *Viperactive* and, of course, *Unsnakeable*. [*Redeye*, August 18, 2006, from Bill Burnett]

• Sometimes I wish I could run pictures! This is one of those times. A veterinarian is pointing at a series of overlapping x-rays tacked up on a light box which show the insides of a python which ate its electric blanket, cord and all. The 12-foot Burmese was saved by surgery which extracted the blanket which "must have gotten tangled up in the snake's rabbit dinner," according to its owner. Fortunately, the snake unplugged the blanket while swallowing it. [*South Florida Sun-Sentinel*, July 20, 2006, from Bill Burnett]

Science isn't opinion, bias or cant

"William Alsup, a judge on the U.S. District Court for Northern California, ruled that [Julie] MacDonald [deputy assistant secretary of the interior for fish and wildlife and parks since 2004] had arbitrarily instructed Fish and Wildlife scientists to downgrade [the endangered Santa Barbara and Sonoma salamanders by ruling they were no longer distinct populations entitled to protection] even though an agency scientist concluded that genetics state otherwise." The judge wrote in the decision that the secretary has a right to "re-assess the evidence," but that there must be "a discernible rationale" for said reassessment. Meanwhile "Hundreds of pages of records, obtained by environmental groups through the Freedom of Information Act, chronicle the long-running battle between MacDonald and Fish and Wildlife Service employees over decisions whether to safeguard plants and animals from oil and gas drilling, power lines, and real estate development, spiced by her mocking comments on their work and their frequently expressed resentment. . . . The documents show that MacDonald has repeatedly refused to go along with staff reports concluding that species such as the white-tailed prairie dog and the Gunnison sage grouse are at risk of extinction. . . . To view the evidence and view results from the FWS scientist survey, visit www.ucsusa.org/scientific_integrity," according to the *Washington Post*, October 30, via HerpDigest, November 1, 2006, from Allen Salzberg.

Herps have lost a voice

By now, everyone on earth knows that Steve Irwin, the Crocodile Hunter, died during a swim—stung by a stingray barb through the heart which caused his death when he tried to pull it out backwards. Now comes a report that even the turtle named after him is in trouble, the potential victim of yet another dam project. *Elseya irwini*, Irwin's turtle, lives exactly where the government of Queensland, Australia, would like to build the Urannah dam. HerpDigest reports: "The Burdekin Basin draft water resource plan, which addresses environmental implications of the proposed Urannah dam, states: '*Elseya irwini* is known to occur in this reach. This species is of high conservation significance and is restricted to the Broken-Bowen River system and the lower Burdekin River.' The first person to catch the *irwini* was Steve Irwin's father, Bob, on a fishing line during a family camping trip in 1990. The family were confused by the creature as nobody had seen it before. They suspected it might be new species." Meanwhile, "Irwin's voice will be used in a Hollywood film due for release in December. Before his death, Irwin voiced the role of a cartoon character, an elephant seal, which will appear in the film *Happy Feet*, which also stars Nicole Kidman, Hugh Jackman and Elijah Wood," concludes HerpDigest [October 10, 2006, from Allen Salzberg]

Boldly looked where no one had gone before

Rory Callinan wrote one of the most interesting, well-written pieces to pass my desk in ages for *Time* magazine, November 13, 2006: "It was just after midnight when frog researcher Steve Richards heard a strange melodious whistle amid the patter of rain in the Papua New Guinea cloud forest. The sound swept away the Australian zoologist's exhaustion as he struggled through the thorny vines and stinging nettles covering the remote mountain slope in the Southern Highlands. 'When I heard this, I knew it was going to be fantastic,' he says. Switching on his tape recorder and headlamp, he moved carefully toward the sound, trying not to blunder into one of the limestone sinkholes that dot the area. After an hour's searching, Richards and his companion, a local hunter, found the source: a 'warty brown blob' squatting on moss in a patch of nettles. When he reached over and gently took hold of the blob, it twisted viciously in a very unfroglike manner and bit him on the hand. 'I was shocked,' he says. 'Frogs don't

normally bite you. There's only one other frog in P.N.G. that does that.' The animal's bite, coupled with its unique cry and strange appearance, told Richards he had snared a place in the zoological textbooks with the discovery of a new species. It was an exhilarating moment for the 44-year-old—but such discoveries aren't new to him. In 15 years of scouring P.N.G., Richards, who's attached to the South Australian Museum, believes he has discovered almost 100 new frogs. Of these, he has managed to 'describe,' or scientifically classify and name, 30; he still has about 70 whose features must be studied carefully before they can be classified as a new species. 'We are really only scratching the surface,' he says. 'Every time anybody goes searching in P.N.G. anywhere, they find new things.' Richards estimates that 350 species of frog have been identified on the island of New Guinea, but predicts the number will eventually pass 600. With frog populations worldwide under threat from habitat destruction, fungus infections and introduced predators, Richards, whose research is funded by Conservation International, believes recording the amphibians is of vital importance. 'New Guinea, outside of the Amazon and some areas of central Africa, has the largest areas of rainforest left,' he says. 'Nobody is working there, and what's there is so spectacular.' Late last year Richards was a member of a scientific expedition to the neighboring Indonesian province of West Papua that found dozens of new animal and insect species in the remote Foja Mountains. As for the warty blob he discovered in the Southern Highlands, he has yet to finish the classification process. But it's likely to have a name associated with its snappy temperament. 'I like a frog with attitude,' he says." [from Wes von Papineäu and Humboldt Medical Group's waiting room]

Hiss heart was in the right place

A man bitten in Sydney, Australia, recovered after an amazing experience. According to their *Daily Telegraph*, this is what happened: "'Just give me a smoke and a beer and I'll be right!' They could have been Bruce Campton's last words after he was bitten five times by a death adder—the world's ninth-deadliest snake. At Wiseman's Ferry on the Hawkesbury River a month ago, Mr. Campton, 50, saw a feral cat swiping at what he thought was a blue-tongued lizard. 'I like blue-tongues, they're harmless, so I bent down to get it away from the cat and it bit me,' he said. 'I didn't realize it was a snake, I just thought it was a cheeky bugger lizard. 'I brought my other hand around to grab it closer to the head and it bit me again and it wouldn't let go so I walked back to the caravan and ripped it off and shoved it in the beer box. That's when my brother-in-law said, "That doesn't look like a lizard. It's got no legs."' A man staying nearby looked at the 'lizard' in the box and shouted: 'It's a bloody death adder!' Mr. Campton shrugged off the concern, asking for a smoke and a beer. 'I didn't think death adders were found this far south,' he said. Seconds later his legs began to tingle and he felt 'funny.' 'I fell backwards off my chair and I couldn't move. I started freaking and then I guess I passed out,' he said. 'I was going in and out of consciousness. I remember thinking 'this is it' and I told (brother-in-law) Colin to tell the family I loved them and tell my boys I wasn't in any pain.' Mr. Campton, from Vineyard in northwest Sydney, was returning from the shops when he came across the snake in a dip in the path. 'I was only trying to help it. If I knew it was a snake of course I wouldn't have touched it. I grew up around animals and I know to respect them,' he said. The residents of the caravan park called an ambulance and then the Careflight rescue helicopter, which saved Mr. Campton's life. Doctors injected him with a record five types of antivenom. He spent five days in intensive care in Westmead Hospital regaining feeling and movement in his hands and limbs. 'I realize how lucky I was to survive. It's surprising how hard you can fight when you don't want to die,' he said. 'I want to thank the Careflight doctors and the staff in the Westmead Hospital ICU for saving my life, and my family for being there and talking me through even when I couldn't open my eyes.' With so much antivenom in his veins, Mr. Campton's doctor warned him not to go near any more reptiles. 'I can't have any more vaccine for 10 years,' he said. 'It's based on horse-blood you know. I reckon I could pick the Melbourne Cup [horse race] winner this year.'" [from Wes von Papineäu]

Thanks to everyone who has and continues to contribute to this column and thanks to everyone for understanding its occasional hiatus. Please keep those cards, envelopes, giant envelopes and small boxes coming—my postmistress is endlessly amused by the profusion of reptile-decorated objects that continue to arrive in my mailbox. She even said one time, "I thought you were all about frogs," as she handed me my Daytona Reptile Expo Guide. Send your contributions to: Ellin Beltz, POB 1125 Ferndale, CA 95536-1125!

Bull. Chicago Herp. Soc. 41(11):209-210, 2006

What You Missed at the October CHS Meeting

by John Archer
j-archer@sbcglobal.net

Frogs! You ophiocentrics out there may not have noticed that frogs are receiving a lot of attention recently, from starring in special issues of *Reptiles Magazine* to a popular exhibit at the Museum of Science and Industry, to new books such as *Frogs* by CHS member and *Bulletin* contributor Ellin Beltz. So the CHS, following the trend, has had two frog speakers in the last few months. The members of our society who already hold frogs in high esteem welcome this surge in popularity, but even the most diehard snake lovers had to enjoy Marty Crump's presentation at the October meeting. I had the honor of providing shelter and transportation for Marty while she was in Chicago. She's a past professor of zoology at the University of Florida, Gainesville, author of numerous papers and books, field biologist specializing in tropical frog ecology and behavior, wife, mother, and currently adjunct professor of biology at Northern Arizona University in Flagstaff, where she lives with her husband, two dogs, and two leopard geckos. She's busy writing more books and still doing field work. She's also a really nice person.

I hate her.

No I don't.

I want to, because, like so many of our speakers, she makes me think, "Yeah. What have I done with my life?" But it's impossible for me to dislike Marty. She's too much fun to be around. The opportunity to spend a few hours or a couple of days with a person like Marty is certainly one of the major benefits of membership in the CHS.

Marty titled her presentation "Amazing Frogs." She opened with a gracious thank-you to the society for inviting her and a claim that we were her absolute all-time favorite kind of audience. After that, how could we not like her? What she wanted to talk about was the wide diversity of frogs, not only in size, shape and color, but also in reproduction, defense and lifestyles.

Armed with many beautiful slides and an incompetent projectionist (hey, you try taking notes and working a projector at the same time!), Marty started by mentioning that currently biologists recognize about 5200 species of frogs, most of them tropical. A slide of Santa Cecilia, Ecuador, flashed on the screen. Marty had lived and done field work for a year there, and she pointed out that in an area much smaller than the city of Chicago, about 80 species of frogs existed. For comparison, all of the U.S. and Canada have but 90 species.

Starting with physical differences, particularly faces, Marty flashed photos of some of the many strange-shaped frogs, including the wrinkled look of the Lake Titicaca frog (*Telmatobius culeus*) from Bolivia, the pointed nose of Darwin's frog (*Rhinoderma darwinii*), from Chile and Argentina, and the well-known White's treefrog (*Litoria caerulea*) from Australia. As the lovable mug of a White's filled the screen, Marty said she had never known anybody who kept one who didn't smile when they looked at it.

She moved on to color differences, and we stared at much larger than life-sized images of the golden toad (*Bufo periglenes*) of Costa Rica, which Marty may have been the last to see in the wild before its extinction, many harlequin frogs (*Atelopus* spp.), poison dart frogs (*Dendrobates* spp.) and a little treefrog (*Hyla leucophyllata*) that Marty called the "giraffe" frog because of its reticulated pattern. On one of her earliest trips to the tropics, as a brand new field biologist, Marty came upon this frog and was convinced the color was too striking to be natural and that her advisor had painted the frog as a practical joke. Looking at the image on the screen, I could sympathize with her incredulity.

Moving into the many defenses of frogs, Marty started with a fire-bellied toad (*Bombina orientalis*) and its unken reflex. Then came a picture of the weirdest defensive posture I've ever seen, showing a little frog (*Phyllomedusa vaillanti*) on its back with legs and body contorted into a position that made it resemble a snake's open mouth! She talked of how the Darwin's frog will play dead by flipping on its back, in which position it resembles a leaf. Frequently it will back-flip into a stream, where it convincingly resembles a leaf floating with the current. Many more examples included the bright side and groin coloring of many otherwise cryptic treefrogs, and the large eye spots and pseudo face on the inflated rear end of *Eupemphix nattereri*, of which Marty included a front shot. I'm not sure I've ever seen a picture of the real face of this frog. A few frogs actually have spines to defend themselves, which Marty, from personal experience, testified were quite effective. And *Hemiphractus proboscideus is* a frog with not only the normal upper teeth of most frogs, but two fangs on the lower jaw. Marty had a picture of this little frog hanging from her finger after her counselor talked her into sticking her finger in its mouth. Yeah, it hurt! The females of these little frogs carry their eggs around on their backs, and when the tadpoles transform into tiny frogs, they stay attached with two small cords for a few days, an obvious reluctance to cut the cord.

Frogs are tremendously varied in methods of reproduction. While showing pictures of mating balls, Marty mentioned that females are sometimes drowned by the males which congregate around her. Many species of frogs lay eggs on plants above water, and when the tadpoles emerge they flip themselves out of the egg cluster, sometimes landing in water, but many times missing and perishing because of their bad aim. Early in her career, Marty was given a group of strawberry dart frogs (*Dendrobates pumilio*), which bred in a terrarium she kept in her office. She didn't realize how special this was until a couple of years later a paper was published describing the unique reproduction of this little frog. The eggs are laid on land, and when the tadpoles emerge, the female transports them individually to its own bromeliad full of water. After depositing each of her tadpoles, she returns periodically to deposit unfertilized eggs as food for them. Marty remains frustrated

that she had the groundwork for a paper sitting in her office and failed to recognize it. The male Darwin's frog transforms his vocal sac into a brooding pouch, where he deposits the nearly-hatched eggs and carries them until their transformation to frogs. *Pipa pipa*, the Surinam toad, actually lays its eggs on the females' back, where they're carried until they fully transform into miniature frogs. Then they break out of the skin which has grown over them and swim away. Some frogs (e.g., *Eleutherodactylus* spp.) don't rely on water at all for breeding. This is one of the reasons the greenhouse frog (*Eleutherodactylus planirostris*) has been so successful in colonizing greenhouses.

Marty finished with the different lifestyles frogs exhibit, from completely aquatic to totally terrestrial. Where else have you seen a picture of the completely aquatic Lake Titicaca frog on land? It looks like a blob of melted pudding. Burrowing frogs (*Hemisus* spp.) lay eggs underground where the mother remains until the tadpoles emerge. Then she digs an underground tunnel to water and the tadpoles escape through the tunnel. Male foam-nesting frogs (*Leptodactylus bufonius*), dig a small burrow, creating what looks like a miniature volcano in the mud. He calls from the burrow, and if successful in luring a female, eggs and sperm are deposited in the foam they whip up. He leaves, but she stays and urinates in order to soften the mud, then seals the burrow. The fertilized eggs remain encased in foam and mud until sufficient rainfall dissolves the mix and releases the tadpoles. The eggs can survive in the burrow for over fifty days without rainfall. Many tropical fogs, such as the golden toad, live underground, emerging for only two or three weeks out of the year . Spadefoot toads (*Scaphiopus* spp.) dig burrows as deep as seven feet, where they can survive up to three years waiting for rains to release them. They quickly breed, and then burrow underground until the next sufficient rainfall.

As usual, I'm frustrated that I can't present her entire lecture. The unique photos, great stories, and engaging anecdotes I'm sure made Marty's presentation interesting even to those of you who view frogs as simply snake food. She's a fun and interesting companion and a terrific speaker. And she quilts, too.

Next time you surf the WorldWide Web, crawl, run, slither, slide, jump, or hop over to the CHS web site!

www.chicagoherp.org

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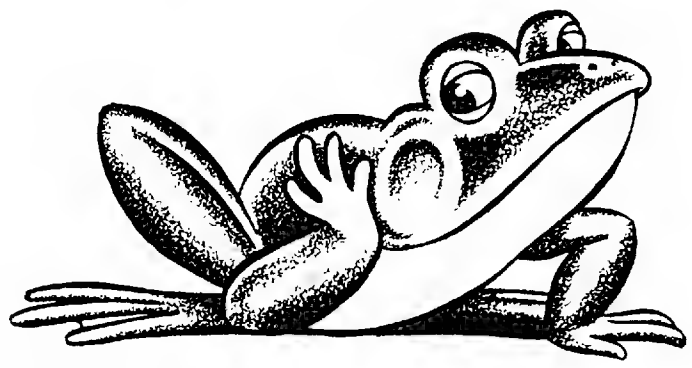
The Tympanum

Dear Editor:



My reason for writing is twofold. First, I must commend the CHS for publishing the Special Supplement *Bulletin* "Death from Snakebite: The Entwined Histories of Grace Olive Wiley and Wesley H. Dickinson" (September 2006) that deals specifically with the reckless lifestyle of two controversial figures. I understand that some of the photos had hitherto not been published. How would you like to have lived next door to such arrogantly selfish individuals, who very well may have been suffering from a silent death wish, and who obviously gave little thought to the well-being of their neighbors when they allowed serpentine death to roam freely across their properties? I just hope that young students just getting started in herpetology don't get the wrong idea and try some of these foolish acts themselves. Unfortunately some of this free-handling of dangerously venomous snakes still goes on today, as perfectly exemplified by the late Steve Irwin; Grace and Wesley must surely have been two of Steve's treasured idols.

Secondly, congratulations to David S. Lee for his excellent article, "Harriet: A Noble Old Tortoise in Need of Credentials" [Bull. Chicago Herp. Soc. 41(9):161-165]. David must have spent countless hours (probably more like weeks) in researching this topic. As an addition to David's well-written portrayal and origin of such a fine beast, I would like to add the following comments. During the mid to late 1990s, when I was writing a regular column for Australia's *Monitor* magazine (then in the capable hands of Brian Barnett), Steve Irwin and his wife submitted an article on this particular tortoise, and because I had published a rather extensive article on the reptiles of the Galapagos Islands, and had visited the region on several occasions, Brian sent me the article for review. After reading it thoroughly, including every millimeter of space between each and every line, I recommended to Brian not to publish it. The information was extremely vague, specific points were hearsay only, and no DNA results had been obtained. Of course the Irwins recalled said article and made no effort at all to explain these "questionable" points to either Brian or myself. However, in true Irwin fashion and using their thrill-seeking abilities, they did get it published. But the connection of Harriet to Charles Darwin remains just as doubtful now, as it did then. DNA results have shown the tortoise to be from an island that was never even visited by Darwin!

There is no doubt that Harriet originated from the Galapagos Islands, and that she survived the rigors of captivity for a considerable length of time, but any and all connections to Darwin himself will never come to light. Of course the late Steve Irwin would never agree to this. After all, doing so would lessen the limelight under which he performed so well, and so recklessly. **Karl-Heinz Switak, Natural History Photography, 6377 Stone Bridge Road, Santa Rosa, CA 95409-5859**.

Longevity Record? Might be close.

Some anecdotal information on one female *Eublepharis macularius*:

An already adult female purchased by me in June of 1978 died today [10 November 2006] after 28 years, 5 months in captivity. She consistently produced 3 or 4 clutches of viable eggs per year, up until ten years ago. Then she stopped. One of a breeding group of five. The others had relatively normal life spans. The male died over seven years ago. She had dropped her tail at the base once after only a year in captivity. At times the regrown tale would swell to an enormous size, then slowly decrease over time despite consistent feeding. During this past year she was increasingly lethargic and the abdomen began to become misshapen. She would still eat one or two pinkies per week, up until last week. That's all. I don't know if anyone is keeping records of this type of information, but having had dozens of these geckos it seemed unusual enough to report. I still have one of her original offspring, another energetic female approaching 17 years, and will watch her closely. Best Regards, **Neil Trais, 8215 N. Tripp, Skokie, IL 60076**.

Bull. Chicago Herp. Soc. 41(11):212-213, 2006

Herpetology 2006

In this column the editorial staff presents short abstracts of herpetological articles we have found of interest. This is not an attempt to summarize all of the research papers being published; it is an attempt to increase the reader's awareness of what herpetologists have been doing and publishing. The editor assumes full responsibility for any errors or misleading statements.

TAIL-COILING IN RINGNECK SNAKES

M. L. McCallum et al. [2006, Herpetological Natural History 10(1):91-94] report that although tail-coiling behavior has been noted and well described in the literature, the evolutionary drive for this trait's expression has remained unknown. The two most obvious hypotheses explaining tail-coiling in ringneck snakes (*Diadophis punctatus*) are that it is a startle display or functions as a decoy to misdirect predator attack. The authors compared frequency of tail injuries in 200 *D. punctatus* to the frequencies in 145 *Carphophis amoenus*, 60 *Storeria occipitomaculata*, and 61 *S. dekayi*. The three species used for comparison are not known to perform tail-coiling. Tail damage occurred in 9.5% of *D. punctatus*, 0.7% of *C. amoenus*, 3.3% of *S. occipitomaculata*, and 6.6% of *S. dekayi*. There were significantly more instances of tail damage in *D. punctatus* than in the other three species ($\chi^2 = 13.345$, $df = 3$, $P < 0.01$). The frequency of tail damage in males, females and juveniles was not significantly different ($\chi^2 = 0.45$, $df = 2$, $P < 0.80$). The presence of significantly more tail damage in *D. punctatus* than the other three species suggests that tail-coiling might play a role in maintaining this frequency. If this behavior were a startle display, *D. punctatus* should not possess any more incidences of tail damage than the other species. Because *D. punctatus* does possess more, the authors accept the decoy mechanism as an appropriate explanation for tail-coiling behavior.

CROCODILES IN QUINTANA ROO

J. R. Cedeño-Vasquez et al. [2006, Herpetological Natural History 10(1):17-30] conducted spotlight surveys and a mark-recapture program from February to October 2002 to determine the population status of the American and Morelet's crocodiles *(Crocodylus acutus* and *C. moreletii*, respectively) in southeastern Quintana Roo, Mexico. Six hundred forty-five crocodiles (46 *C. acutus*, 599 *C. moreletii)* were detected along 205.2 km of survey route. *Crocodylus acutus* occurred in coastal saltwater habitats, and *C. moreletii* inhabited freshwater systems. In brackish creeks located in northern Chetumal Bay, *C. moreletii* occurred syntopically with *C. acutus. The C. acutus* population was largely composed of subadults *(53.1* %), followed by adults (34.3%), and juveniles (6.25%); whereas *C. moreletii* was equally represented by subadults (27.9%), juveniles (27.6%), and adults (25.9%), while hatchlings and yearlings constituted only 9.0% and 9.4%, respectively. Encounter rates for *C. acutus* were lower than for *C. moreletii* (0.13-2.69 and 0.87-7.57 crocodiles/km, respectively). Population sex ratio was not significantly different from parity for *C. moreletii.* At present, there are no major threats to the continued survival of Morelet's crocodile in the study area. On the other hand, the small population of *C. acutus* is threatened by accidental drowning in fishing nets and future development of nesting habitat for tourism.

CROCODILES IN MYANMAR

J. Thorbjarnarson et al. [2006, Herpetological Natural History 10(1):77-89] note that Myanmar is the largest country in mainland Southeast Asia, but its fauna is poorly known owing to a lack of biological surveys over the past 50 years. The situation concerning crocodilians is particularly confusing. Five species (*Crocodylus porosus*, *C. palustris*, *C. siamensis*, *Tomistoma schlegelii*, *Gavialis gangeticus*) have been reported from Myanmar, but the basis of many reports is unclear. The authors reviewed historic accounts and found that verified records for *C. siamensis* and *T. schlegelii* are lacking, and the occurrence of *C. palustris* is based on a single questionable record from the late 1800s. *Gavialis gangeticus* apparently occurred in tributary streams of the Ayeyarwady, but was extirpated in the early 1900s. *Crocodylus porosus* is the only extant species occurring in Myanmar. Although once widespread in coastal regions, the species is now confined to the lower Ayeyarwady River, and coastal Rakhine and Tanintharyi States. The only viable *C. porosus* population remaining in Myanmar is in Meinmahla Kyun Wildlife Sanctuary and adjacent Reserved Forests of the Ayeyarwady Delta. Crocodiles are completely protected in the sanctuary, and a head-start program was initiated in 1998 to return juveniles to the wild. Surveys in 1999 and 2003 found large numbers of juvenile and subadult crocodiles, suggesting population recruitment is occurring. Crocodile nesting in the sanctuary and surrounding Reserved Forests was also documented. Conservation efforts are complicated by occasional fatal attacks on humans. A crocodile farm established in Yangon during 1978 and stocked with wild-caught animals has made no significant contribution to crocodile conservation.

LOUISIANA PINE SNAKE SURVIVORSHIP

J. G. Himes and L. M. Hardy [2006, Herpetological Natural History 10(1):9-16] collected data on survivorship and mortality of 30 adult (29 wild, one captive-bred and released) and eight juvenile (one wild, seven captive-bred and released) Louisiana pine snakes, *Pituophis ruthveni,* in western Louisiana and eastern Texas during 1993-97. Twenty-five snakes were implanted with transmitters subcutaneously; 13 snakes were implanted using abdominal surgery. The authors estimate that wild snakes were at least 100 cm total length at the end of their first year of life, approximately 125 cm or longer at the end of their second year, and 160 cm or more at the end of their third year. Overall, survivorship after release of wild and captive-bred snakes was 50%. Twelve and seven snakes subjected to subcutaneous and abdominal surgery, respectively, survived to the end of the study. Male survivorship was higher during the first two seasons of study (five total), whereas female survivorship was higher for seasons 4-7. Survivorship did not differ among seasons of the year. There was no significant difference in mortality rate among seasons. However, autumn mortalities were only of males and spring mortalities were only of females.

MASSASAUGA MOVEMENTS

J. C. Marshall et al. [2006, Herpetologica 62(2):141-150] note that the eastern massasauga, *Sistrurus c. catenatus*, is a small rattlesnake threatened with extirpation throughout its range. Massasaugas occur in a variety of habitats and adequate knowledge of their natural history at local scales is essential for effective management. The authors used radiotelemetry to document patterns of movement and macrohabitat selection of massasaugas in a fen environment, an important, but understudied, habitat. Based on both 100% minimum convex polygons and 95% kernel density, seasonal home ranges of males were larger than those of nongravid females which, in turn, were larger than those of gravid females. Activity center estimations followed the same trend as the seasonal range estimations. Similarly, activity centers (50% kernel density) of males were larger than those of nongravid females which were larger than those of gravid females. Nongravid females and gravid females differed in their mean frequency of daily movement, distance moved per day and total distance moved in a season. Males also differed from gravid females in these three regards, but only differed from nongravid females in distance moved per day. Compositional analysis of both 100% MCPs and 95% kernel densities indicated a preference for emergent wetland vegetation by all individuals; however, wooded areas and meadows were used to a lesser extent.

HATCHLING TORTOISE SURVIVORSHIP

D. A. Pike and R. A. Seigel [2006, Herpetologica 62(2): 125-131] note that survivorship of hatchling chelonians is low in many instances, although few investigators have intensively studied the immature life stages. The authors used radiotelemetry to assess hatchling gopher tortoise (*Gopherus polyphemus*) survivorship in central Florida (n = 20), and compared results to previously published studies in north Florida and Mississippi. At the authors' site tortoise predation was extremely high, and no hatchlings lived over 335 days. Average lifespan was consistent among clutches, and the highest mortality occurred within one month of hatching. Major predators included mammals and snakes. These results are similar to published data from north Florida (n = 20) and Mississippi (n = 45), although hatchlings in north Florida survived the longest. However, all tortoises (n = 85) in each study died many years before reaching sexual maturity due to predation. Hatchling predators varied by site, but mammals were the major predator at all three sites. The authors discuss the population-level consequences of high mortality in the younger life stages and several hypotheses associated with population stability. Although hatchling mortality was extremely high, long-term data from the authors' central Florida site show that immature animals are captured on a regular basis. The most likely explanation for this apparent contradiction is that true hatchling survival levels are above zero, but are too low to be accurately detected with the current sample sizes. Therefore, long-term mark-recapture studies focusing on hatchling and juvenile animals are necessary to determine whether recruitment is sufficient to maintain current population sizes, or if populations are declining slowly.

HERPETOFAUNA OF AMPIJOROA

A. Mori et al. [2006, Herpetological Natural History 10(1):31-60] surveyed the herpetofauna of Ampijoroa, a tropical dry deciduous forest in Ankarafantsika Strict Nature Reserve in northwestern Madagascar. An opportunistic transect survey was conducted from 6 October to 8 November 1999 (from the end of the dry season to the beginning of the rainy season) and from 3 October 2000 to 22 January 2001 (from the end of the dry season to the middle of the rainy season). Forty-seven species of reptiles (25 lizards, 19 snakes, two turtles, one crocodile) and nine species of frogs were found. Approximately one-third of the 47 reptile species are new records for Ampijoroa; these include several undescribed or recently described taxa. Examples of these new records are a species in the *Brookesia minima* group and a fossorial skink, *Sirenoscincus yamagishii*. The species richness of reptiles in the Ampijoroa forest is higher than that of other dry forests in Madagascar and is comparable to, or even higher than, that reported previously from rainforests. By contrast, the amphibian fauna in Ampijoroa is relatively poor compared to that of the rainforests, although the ecological roles of amphibians in the Ampijoroa forest did not seem to be unimportant. The high diversity of the Ampijoroa reptile fauna demonstrates the ecological importance of tropical dry deciduous forests in Madagascar.

POPULATION VARIATION AMONG COLLARED LIZARDS

J. F. Husak and M. N. Rouse [2006, Herpetologica 62(2): 156-163] note that the evolution of the morphological traits underlying locomotor performance is often addressed at the level of species comparisons; however, examining variation in traits within a species and the underlying selective pressures that presumably mold those traits can offer great insight into the effects of natural selection, as well as the selective forces responsible for phenotypic changes. The authors studied limb morphology and escape behavior of three Oklahoma populations of collared lizards (*Crotaphytus collaris*): Glass Mountains (GM), Sooner Lake (SL), and Wichita Mountains (WM). Predation differs among populations, with WM > SL > > GM. Habitat openness also varies, with SL > GM > WM. Analysis of limb morphometrics revealed that WM had the longest hindlimb elements, GM lizards had the shortest, and SL lizards were intermediate. These differences are consistent with the hypothesis that predation pressure rather than habitat structure is most important in determining hindlimb morphology. WM lizards were found to have the longest approach distance among populations, but GM lizards ran the longest distances from predators. These differences in escape behavior support the hypothesis that predation pressure is important in determining population differences in behavior.

Unofficial Minutes of the CHS Board Meeting, October 13, 2006

Rich Crowley called the meeting to order at 7:30 P.M. Board member Betsy Davis was absent.

Officers' Reports

Recording Secretary: Zorina Banas read the minutes of the September 15 board meeting. Minor adjustments were made and the minutes were accepted.

Treasurer: Andy Malawy distributed the financial reports and went over the income statement for September 2006 with the board.

Membership Secretary: Deb Krohn distributed the June 2006 membership report. Total membership stands at 548. Deb distributed examples of membership brochures for the CHS that a colleague has been designing. The board discussed having her design a new brochure and also having her design the large display board for the CHS.

Vice-president: Linda Malawy reported that the speaker for February will be Whitney Banning, a graduate student and 2005 CHS grant recipient, who is currently working on Blanding's turtle conservation with Mike Dreslik of the Illinois Natural History Survey.

Corresponding Secretary: Cindy Rampacek reported that she has received donations and gift certificates for the raffle from Rodent Pro and Classic Dums. Cindy will continue to correspond with different companies for donations.

Publications Secretary: Erik Williams will continue to work with Chris Lechowicz on the web site and discussion forum.

Sergeant-at-arms: Linda Malawy reported for Betsy that attendance at the September meeting was 50.

Committee Reports

Shows: Linda Malawy reported that the Milwaukee Public Museum will be having their annual Snake Day Saturday November 18. The Peggy Notebaert shows are on the first full weekend of each month.

Monthly raffle: Josh Chernoff will be running the raffle at the general meeting every month. Members should speak to Josh if they would like to donate merchandise.

Adoptions: Bob Bavirsha reported searching for a 2½-foot alligator that had been seen several times in the Des Plaines River. Bob now has a 10-foot Burmese python was found in the forest preserves. Bob mentioned that he and Dan drove 77 alligators, 1 crocodile, 2 large boas, some monitors, several snapping turtles and a sulcata to the Colorado Alligator Farm.

New Business

Great Lakes Pet Expo: Cindy Rampacek reported that the CHS is invited to this pet expo again this year, to be held Saturday, February 10, in Milwaukee. She also mentioned the possibility of a photo booth to help raise funds.

Grants: Mike Dloogatch discussed allocating money in 2007 for grants. Mike suggested that we appropriate $2,000 for 2007.

Deb Krohn moved to allocate $75 to pay a graphic artist to develop a new membership brochure, which includes providing CHS with the electronic file and the permission to freely use and modify it. The final format would be subject to board approval. Cindy Rampacek seconded the motion. Motion passed unanimously.

Roundtable

Bob Bavirsha thanked Josh Chernoff for sewing leather leashes for the alligators.

Mike Dloogatch mentioned that Brian S. Gray has donated to the CHS a copy of his book *The Serpent's Cast: A Guide to the Identification of Shed Skins from Snakes of the Northeast and Mid-Atlantic States*.

Linda Malawy reported that the *Chicago Tribune* did a very nice write-up on Toni Carmichael and the work that she and the students of a Mundelein middle school have been doing on the endangered Blanding's turtle. The story was in the Metro section Wednesday, October 11. The pupils designed and built the courtyard habitat with the help of consultants. Because of the project, West Oak Middle School has been certified by the National Wildlife Federation as an official wildlife habitat.

Josh Chernoff will will be offering at a discount one of the best kinds of flashlights for herpers. Josh will bring a sample to the next general meeting.

Jason Hood thanked Rob Carmichael and his staff for their hospitality and for a very nice breakfast for the CHS members who visited the Discovery Center. The event was a big success.

Rich Crowley and the entire board thank Bob Ashley and Brian Potter for providing a free booth for the CHS at the NARBC.

The meeting was adjourned at 9:40 P.M.

Respectfully submitted by Zorina Banas, Recording Secretary

Advertisements

For sale: rats and mice—pinkies, fuzzies and adults. Quantity discounts. Please send a SASE for pricelist or call Bill Brant, *THE GOURMET RODENT*, 6115 SW 137th Avenue, Archer FL 32618, (352) 495-9024, E-mail: GrmtRodent@aol.com.

For sale: from **The Mouse Factory**, producing superior quality, frozen feeder mice and rats. We feed our colony a nutrtionally balanced diet of rodent chow, formulated especially for us, and four types of natural whole grains and seeds. Mice starting from: pinks, $.17 each; fuzzies, $.24 each; hoppers, $.30 each; weanling, $.42; adult, $.48. Rats: starting with pinks at $.45 each, to XL at $1.80 each. Discount prices available. We accept Visa, MC, Discover or money orders. PO Box 85, Alpine TX 79831. Call **toll-free** at (800) 720-0076 or visit our website: < http://www.themousefactory.com> .

For sale: **high quality frozen feeders**. Over a decade of production and supply. Seven sizes of mice availabe: small newborn pinks up to jumbo adults. Prices start at $25 per 100. Feeders are separate in the resealable bag, not frozen together. Low shipping rates. Free price list. Kelly Haller, 4236 SE 25th Street, Topeka KS 66605, (913) 234-3358 evenings and weekends.

For sale: books. *Our Small Native Animals* by Robert Snedigar, 1963 (2nd ed.), 248 pp., many b&w photos, natural history and husbandry info for mammals, birds, reptiles and amphibians (125 pp.), Snedigar was curator of reptiles, amphibians and invertebrates at the Brookfield Zoo, softbound, $5; *Poisonous Dwellers of the Desert* by Natt D. Dodge, 1955 (1947), 48 pp., many b&w photos and drawings, includes black widow, scorpions, Sonoran coral snake, rattlesnakes and Gila monster, previous owner's name on front and inside covers, softbound, $3; *The Snakes of Arizona* by Jack Fowlie, 1965, 164 pp., b&w photo of each sp. and subsp., dot range maps, signed by author, hardbound, $55; *Australian Geographic*, Jan.-March 1999 issue, contains articles on funnel-web spiders, Cobourg Peninsula, and a trek to the South Pole among others, comes with color poster of Australia's venomous snakes; April-June issue, articles on quolls, Grampians National Park and more, contains color map of state of Victoria. Both of these 128 pp. journals have excellent full-color photos, book reviews and ads for Australia touring companies—a great source of info for Australophiles, $12 per issue; *Australia's North* by Stanley and Kay Breeden, 1975, 208 large (9¾ × 12") pp., excellent color and b&w photos (some full page) including many reptiles such as pythons, monitors and frill-necked lizard (full page color), very good natural history of the Top End (e.g., Kakadu), DJ, hardbound, $30; *Reptiles of Australia* by Charles Barrett, 1950, 168 pp., b&w photos, drawings, no DJ, hardbound, $80; *Distribution of Mammals in Colorado* by David Armstrong, 1972, 415 pp., 36 tables, 133 figs. (mainly range maps), University of Kansas monograph, name of previous owner on frontpiece, hardbound, $36. All publications in excellent condition unless otherwise noted. Postage and handling $2.50 for orders under $25, free for orders of $25 or more. Books make great Christmas presents. William R. Turner, 7395 S Downing Circle W, Littleton, CO 80122, (303) 795-5128, e-mail: toursbyturner@aol.com.

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Wanted: I'm looking for my soulmate. I want to settle down to a family before it is too late. But I have this problem. . . . When we get into hobbies and interests: old popular records, jazz and show tunes, and antique electronics are fine, but when I mention turtles, "What, are you crazy?" So maybe this is a better place to look. Please don't try to separate me from my turtles—at least not most of them. If interested, please drop a line to Ellis Jones, 1000 Dell, Northbrook IL 60062, telling a bit about yourself and giving a phone number.

Line ads in this publication are run free for CHS members—$2 per line for nonmembers. Any ad may be refused at the discretion of the Editor. Submit ads to: Michael Dloogatch, 6048 N. Lawndale Avenue, Chicago IL 60659, (773) 588-0728 evening telephone, (312) 782-2868 fax, E-mail: MADadder0@aol.com

NO excuses

ReptileFest 2007

April 14-15

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17. Signature of Editor Michael Dloogatch

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UPCOMING MEETINGS

The next meeting of the Chicago Herpetological Society will be held at 7:30 P.M., Wednesday, November 29, at the Peggy Notebaert Nature Museum, Cannon Drive and Fullerton Parkway, in Chicago. This important meeting will include the annual election of officers and members-at-large of the CHS Board of Directors. In addition to the elections, this meeting will feature several short slide and video presentations by local CHS members.

The December 27 meeting will be a holiday party. The CHS will provide soft drinks and snacks. If you would like to bring something edible to share with the group, you are invited to do so. If you would like to bring an animal to show off to the group, you are encouraged to do that as well. This will be a chance to socialize all evening and get to know your fellow members a little better.

The regular monthly meetings of the Chicago Herpetological Society take place at Chicago's newest museum — the **Peggy Notebaert Nature Museum**. This beautiful new building is at Fullerton Parkway and Cannon Drive, directly across Fullerton from the Lincoln Park Zoo. Meetings are held the last Wednesday of each month, from 7:30 P.M. through 9:30 P.M. Parking is free on Cannon Drive. A plethora of CTA buses stop nearby.

Board of Directors Meeting

Are you interested in how the decisions are made that determine how the Chicago Herpetological Society runs? And would you like to have input into those decisions? If so, mark your calendar for the December 15 board meeting, to be held at the North Park Village Administration Building, 5801 North Pulaski Road, Chicago. To get there take the Edens Expressway, I-94, and exit at Peterson eastbound. Go a mile east to Pulaski, turn right and go south to the first traffic light. Turn left at the light into the North Park Village complex. At the entrance is a stop sign and a guardhouse. When you come to a second stop sign, the administration building is the large building ahead and to your left. There is a free parking lot to the left and behind the building.

The Chicago Turtle Club

The monthly meetings of the Chicago Turtle Club are informal; questions, children and animals are welcome. Meetings normally take place at the North Park Village Nature Center, 5801 N. Pulaski, in Chicago. Parking is free. For more info call Lisa Koester, (773) 508-0034, or visit the CTC website: http://www.geocities.com/~chicagoturtle.

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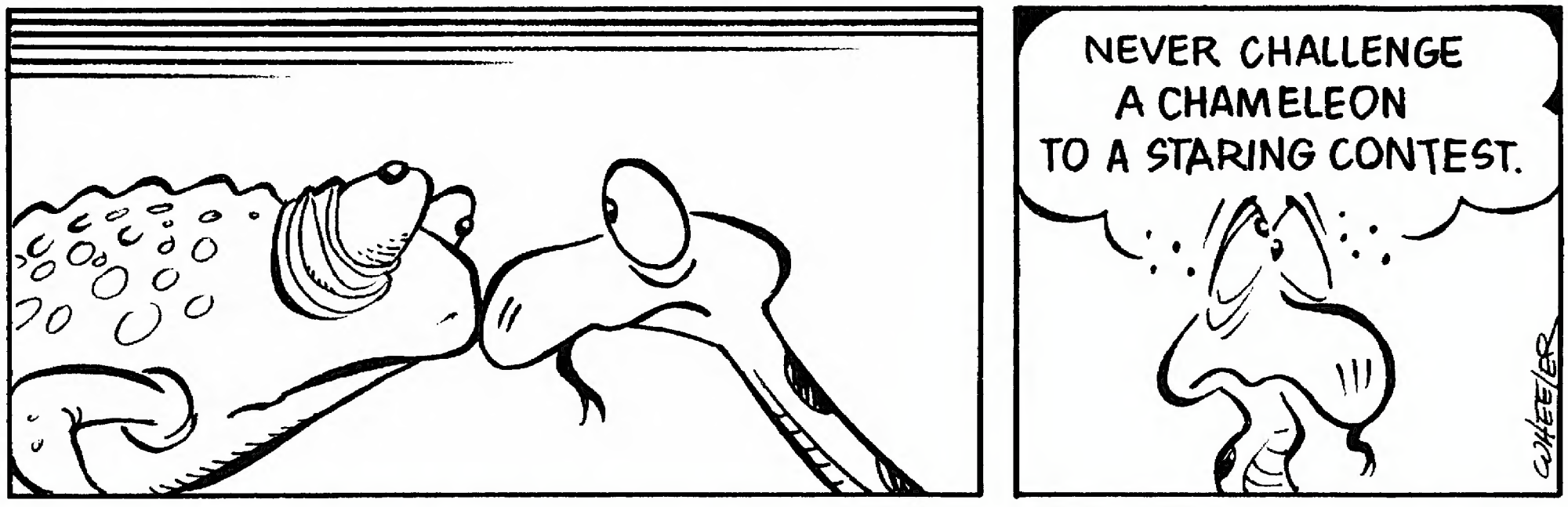

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